



Do you remove paint using conventional sanding or chemical paint stripping?

Would you like to improve this process in the following areas?

- **Meeting environmental compliance regulations** -- Eliminate airborne toxin and dust emissions. Regulatory areas include RCRA and NESHAP.
- **Improving workers' safety and health** -- Eliminate airborne particulate matter and potential lead dust exposure hazard.
- **Increasing productivity** -- Minimize labor time for manual sanding and clean up time by capturing the waste. Improve efficiency of paint removal.
- **Saving money** -- Eliminate generation of waste solvents and reduce clean up costs and time.



Portable Vacuum Sanding System for Paint Removal.

*Designed to replace chemical paint stripping and conventional sanding, the portable vacuum sanding system is a cleaner and safer method for removing paint or corrosion. Vacuums collect the coating material and sanding residue dislodged by the sanders. The solid waste is filtered in the portable unit for disposal. The sanders and vacuum head are colocated to minimize the equipment profile. This technology may be used in hard to access spaces where it is difficult to apply manual sanding or chemical stripping. Clean up time is minimized since the coating material and sanding residue are captured. Personnel safety is significantly enhanced by reducing airborne particulate matter. The Portable Vacuum Sanding System is being used successfully at several Navy installations. **This equipment is available through the Navy Pollution Prevention Equipment Program (PPEP).***

How can you achieve these improvements?

Implement Portable Vacuum Sanding System for paint removal.

How does this equipment work?

Coating or corrosion material is removed and captured with vacuum assist sanders.

How will this equipment save you money?

Cost to implement is approximately \$5,000. The equipment typically pays for itself in under 4 years. For a complete economic analysis refer to Joint Service P2 Opportunity Handbook Data Sheet 2-II-3.



Typical Process Flow Diagram



How can this technology eliminate or reduce pollution?

This technology can reduce worker exposure to harmful airborne dusts generated during sanding operations and chemical paint stripping. Implementation will also result in the following pollution reductions:

- Reduce hazardous waste disposal costs
- Reduce generation of paint chips on surrounding surfaces

Which shops can benefit most from this technology?

This technology can be used in any process that requires paint, surface coating removal or surface preparation. Typical shops include:

- Shipboard Paint and Corrosion Removal
- Aircraft Paint Removal
- Support Equipment Paint Removal
- Facilities Surface Preparation

Take action: How can you implement this technology?

- **Activity Shop & Work Center Personnel.** Contact your Pollution Prevention Program Manager and Safety Program Manager. The P2 Program Manager can provide more information and conduct a more detailed analysis, and may be able to provide this equipment at no cost to a Shop or Work Center. It is imperative that you contact your Safety Program Manager to ensure that this equipment is operated following proper safety procedures.

- **Activity Pollution Prevention Manager.** Request this equipment through the Navy P2 Equipment Program (PPEP). Depending on the application, the Environmental Program Requirements Cookbook may contain project submission information for annual budget requests sent to your claimant.

- **For Additional Technical Information.** More information about this technology can be found on the Joint Service P2 Opportunity Handbook Data Sheet Number 2-II-3 (Web: http://p2library.nfesc.navy.mil/P2_Opportunity_Handbook/2_II_3.html) and the PPEP Book (Web: <http://www.lakehurst.navy.mil/p2/index.htm>).

Achieving Environmental Compliance Through Pollution Prevention

Every day the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by implementing pollution prevention technologies and methods to reduce compliance requirements. This Fact Sheet is one in a series designed to encourage activities to implement pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

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